

# **2005 Design Academy**

## **Access Regulation**

### **A Balancing Act Between *Access & Mobility***

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# Introduction

- ◆ **An overview of the different types of Access Regulation and how they relate to WSDOT and Local Agency projects and functions.**

# Topics of Discussion:

- ◆ **What is Access? How do you fit in?**
- ◆ **Background on Limited Access**
- ◆ **Background on Managed Access**
- ◆ **The RCWs and the WACs**
- ◆ **The Access and Hearings Unit**

# What is Access?

- ◆ **Access is the ability to enter or leave a public street, roadway or highway from an abutting property or another public street, roadway or highway.**



# What is Access Management?

**Determining how WSDOT can best maintain the safety and operational efficiency of our roadways for now and the next 20 years by:**

- ◆ **“regulating the right” of vehicular traffic movement onto and off from the state transportation system.**

# What is the Purpose of Access Management?

- ◆ **To preserve safety.**
- ◆ **To preserve efficiency.**
- ◆ **To protect the public's investment in their transportation system.**

# Managing access:

- ◆ **reduces crashes as much as 50%;**
- ◆ **increases roadway capacity by 23% to 45%;**
- ◆ **reduces travel time and delay as much as 40% to 60%;**
- ◆ **provides increased safety for all transportation system users.**

**Go from this:**



**To this:**



Go from this:



**To this:**



**And this:**





# **Who in WSDOT is affected by access issues?**

**Access issues affect nearly every WSDOT function and section. To name a few WSDOT areas:**

- ◆ **Maintenance, Real Estate Services, Planning, Design, Construction, Scoping, Utilities, Highway and Local Programs**

# **Benefits of Regulating Access:**

## **Safety-**

- ◆ **Fewer and less severe crashes;**
- ◆ **Less auto-pedestrian conflict.**

## **Aesthetics-**

- ◆ **More attractive corridors;**
- ◆ **Improved community appearance.**

# Benefits Cont:

## Efficiency -

- ◆ **Less stop and go traffic;**
- ◆ **Reduced delay;**
- ◆ **Increased and preserved capacity;**
- ◆ **Reduced fuel consumption;**
- ◆ **Preservation of investment in the transportation system.**

# **Benefits Cont:**

## **Livable Communities -**

- ◆ **Enhances community character;**
- ◆ **Preserves neighbor integrity;**
- ◆ **Preservation of private investment of abutting properties;**
- ◆ **Lower vehicle emissions.**

# Which Local Agencies are affected?

**100% ...**

**of the agencies that either abut or rely on access to state highway systems.**

# How is Access Regulated?

## One of Two Programs:

- ◆ **Limited Access**
- ◆ **“Managed Access”**

# **Why is managing access important?**

**If access to state highways is not managed, highway capacity commonly deteriorates.**

**The ability to accommodate traffic in a safe and efficient manner becomes compromised.**

**Arterial  
Improvement**

**Deterioration In  
Level of Service**

**Increased  
Accessibility**

**Increased  
Traffic Conflict**

**Increased  
Land Use**

**Increased  
Traffic Generation**

**Land Use Change**



# **How can this cycle be avoided or minimized?**

**History shows, on a national level, by implementing access management we:**

- ◆ **Reduce collisions**
- ◆ **Reduce Delay and Emissions**
- ◆ **Improve Traffic Flow and Fuel Economy**
- ◆ **Preserve Capacity**
- ◆ **Preserve Public Investment**

# Symptoms of Unmanaged Access ...

- ◆ **High crash rates;**
- ◆ **Poor traffic flow and congestion;**
- ◆ **Numerous brake light activations in the through lanes;**
- ◆ **Strip development;**

# Symptoms of Unmanaged Access Continued ...

- ◆ **Using a local street parallel to the overburdened “arterial” to make a one way pair;**
- ◆ **Pressure to widen an existing street or build a bypass;**
- ◆ **A decrease in property values.**

# **When to use or implement access management?**

**When any decision is being planned or made for a state route such as:**

- ◆ scoping new projects;**
- ◆ route development plans;**
- ◆ in the planning stages of projects;**
- ◆ when right-of-way is needed;**

**in other words ... at every possible opportunity!**

# Opportunities to implement access management:

- ◆ **Refer to Design Manual Chapter 325 – Design Matrix 2, 3, 4 and 5;**
- ◆ **WAC 468-51-140 for WSDOT construction projects;**
- ◆ **Safety Projects;**
- ◆ **Mobility Projects;**
- ◆ **If purchasing R/W along established limited access routes.**

# **History of Limited Access -**

**First authorized in Washington State by the 1947 Legislature**

- ◆ **After WWII there was a new emphasis on the need for efficient and safe transportation, especially highways. Access control had already been used extensively in other states, and it was apparent to the Department of Highways and the Legislature, that access management was needed to maintain reasonable safety and capacity on the higher volume state highways.**

# History continued ....

- ◆ **1951 Legislature provided the basic policy (RCW 47.52), and establishment of the Highway Commission**
- ◆ **July 1953 the Highway Commission passed Resolution No. 95, which established the Master Plan for Limited Access Highways**

# Limited Access Control - Authority

- ◆ **Chapter 47.52 RCW - Statutory Authority for Limited Access**
- ◆ **WAC 468-58 - Limited Access Rules**
- ◆ **WAC 468-54 - Limited Access Hearings**



# **How are Limited Access rights obtained?**

**Through the acquisition, mutual benefit, dedication or donation of access property rights from abutting property owners.**

- ◆ **Cost of acquisition is dependent upon the level of limited access control restriction, and is based on fair market value for the highest and best use under present zoning.**

# **How Limited Access ... “Limits Access”**

**Once acquired, access between the abutting properties and the State Highway or between the State Highway and another public road or highway is limited (frozen) to allow only those access approaches which:**

- ♦ existed at the time of acquisition**
- ♦ are not anticipated to adversely impact the safety and operational efficiency of the highway**
- ♦ are of a type that is consistent with the level of limited access applied to that section of roadway**

# Where are the access rights documented?

## Conveyance document

### ◆ R/W Manual Section 9-10.1.2 states:

- The limited access control clause follows the property description clause in a conveyance of a partial acquisition, adapting the following:

**“Also, the grantors herein convey and grant to the state of Washington all rights of ingress and egress (including all existing, future or potential easements of access, light, view and air) to, from and between (full, official name of project) and the remainder of said (tract, lot or parcel “A”).”**

# Where are the access rights documented cont.

- ◆ **Approved Right of Way and Limited Access Plan. *Note.* some of these may be split plans and you will need research both sets of plans.**
  - **Road Approach Schedule**
  - **Access Notes**
- ◆ **Recorded on the deed to the department.**

# **Where does Limited Access authority reside?**

- ◆ **The State Design Engineer has authority for limited access routes.**
- ◆ **This authority has been delegated to the Assistant State Design Engineers.**
- ◆ **Regions work with the Access and Hearings Unit when dealing with limited access issues.**

# Limited Access Control - Levels of Restriction

## Three levels of Limited Access Control:

- ◆ **Full (most restrictive)**
- ◆ **Partial**
- ◆ **Modified (least restrictive)**

# What do the levels of control mean?

## **Full Control:**

- ◆ **Access approaches are permitted only through interchanges at selected public streets, roads, rest areas, viewpoints, or weigh stations.**
- ◆ **All crossings and private approaches at grade are prohibited.**

# Levels continued ...

## **Partial Control:**

- ◆ **Access approaches are permitted for selected public streets, roads, some crossings and existing private driveways.**
- ◆ **No commercial approaches are permitted.**
- ◆ **No direct access if alternate public street or road access is available.**



# Levels continued ...

## Modified Control:

- ◆ **Access approaches are permitted for selected public streets or roads and some crossings and existing private driveways.**
- ◆ **Commercial approaches may be permitted.**
- ◆ **No direct access if alternate public street or road access is available.**

# Limited Access Control Road Approach Types

## **Type A – Residential Approach**

**“...for the sole purpose of serving a single family residence.” (Allowed on partial and modified control routes.)**

## **Type B – Farm Approach**

**“...for use necessary to the normal operation of a farm, but not for retail marketing.” (Allowed on partial and modified control routes.)**

# **Limited Access Road Approach Types continued ...**

## **Type C - Special Purpose Approach**

**“...for special purpose and width to be agreed upon.” (Allowed on full, partial and modified control routes.)**

## **Type D – Commercial Approach**

**“...for use necessary to the normal operation of a commercial establishment.” (Allowed only on modified control routes.)**

# **Limited Access Road Approach Types continued ...**

## **Type F – Wireless Communication Site**

- ◆ **WAC 468-58-080(vi)**
- ◆ **“...for the sole purpose of serving a wireless communication site.” (Allowed on partial control routes.)**
- ◆ **The approach is permitted NOT deeded.**
- ◆ **One user per permit.**
- ◆ **An approach may have more than one permit issued.**

# **When working Limited Access issues:**

- ◆ **Contact your region or area Limited Access Manager.**
- ◆ **Refer to Design Manual Chapter 1430.10 for requirements.**
- ◆ **Working with your region Limited Access Manager, the Access and Hearings Unit needs to be contacted.**

# **When working Limited Access Issues continued:**

**Using DM 1430.10, develop a listing of  
Limited Access needs including:**

- ◆ **Why? WSDOT needs the background and history for the request.**
- ◆ **What other alternatives have been looked at? (Just one site is not acceptable.)**
- ◆ **What types of impacts will the break create?**
- ◆ **How will the impacts be mitigated?**

# **Trail & Pedestrian Structure Breaks? Work with RES ...**

**ANY use of limited access MUST work through the requirements noted on the last two slides...even pedestrian facilities.**

- ◆ **RCW 47.30 regulates trails.**
- ◆ **Specific requirements must be met to be considered a highway purpose.**
- ◆ **Use must have correct document.**

# Background on "Managed Access"

- ◆ **Where it came from**
- ◆ **What it is intended to accomplish**
  - **Decreasing Decision Points**
  - **Decreasing Conflict Points**



# **“Managed Access” RCW And WACs**

- ◆ **Chapter 47.50 RCW - Statutory Authority for Managed Access**
- ◆ **WAC 468-51 - Administrative Procedures**
- ◆ **WAC 468-52 - Standards**

# **Grand-fathered Connections**

**Connection in existence prior to July 1, 1990**

- ◆ **No Change in Use Since 1990**
- ◆ **Traffic Volumes of site and highway similar to 1990 volumes**

**Review the connection when:**

- ◆ **Intensity of Use Changes**
- ◆ **Safety or Mobility Project Design**

# **Where does authority for Managed Access reside?**

- ◆ **The region does not have authority to reclassify route designations, the State Design Engineer does.**
- ◆ **The region has authority for the connections to managed access routes outside incorporated city/town limits.**
- ◆ **Incorporated cities and towns have authority within their incorporated limits.**

# **“Managed Access” Highway Classifications**

- ◆ **Class One - Most Restrictive**
- ◆ **To Class Five - Least Restrictive**

# Class 1

- ◆ **Mobility is primary function.**
- ◆ **Speeds of 50 to 65 MPH.**
- ◆ **1320-foot minimum access spacing.**
- ◆ **No direct access if alternate public street or road access is available.**
- ◆ **Restrictive median where multi-lane is warranted.**

# Class 2

- ◆ **Mobility favored over access.**
- ◆ **Speeds of 35 to 50 MPH in urban areas and 45 to 55 in rural areas.**
- ◆ **660-foot minimum access spacing.**
- ◆ **No direct access if alternate public street or road access is available.**
- ◆ **Restrictive median where multi-lane is warranted.**

# Class 3

- ◆ **Balance between mobility and access in areas with less than maximum build out.**
- ◆ **Speeds of 30 to 40 MPH in urban areas and 45 to 55 in rural areas.**
- ◆ **330-foot minimum access spacing.**
- ◆ **Restrictive median where multi-lane is warranted, TWLTL may be utilized as conditions warrant.**

# Class 4

- ◆ **Balance between mobility and access in areas with near maximum build out.**
- ◆ **Speeds of 30 to 35 MPH in urban areas and 35 to 45 in rural areas.**
- ◆ **250-foot minimum access spacing.**
- ◆ **Non-restrictive medians.**



# Class 5

- ◆ **Access needs generally have priority over mobility needs.**
- ◆ **Speeds of 25 to 35 MPH.**
- ◆ **125-foot minimum access spacing.**
- ◆ **Non-restrictive medians.**

# **“Managed Access” Connection Categories**

- ◆ **Category One      1 to 50 Trips \***
- ◆ **Category Two      51 to 750 Trips \***
- ◆ **Category Three      751 and above Trips \***
- ◆ **Category Four      Temporary Connections**

**\*roundtrips per day**

# Items to consider for Managed Access Projects:

- ◆ **Consolidation of connections;**
- ◆ **Relocation of access to county roads;**
- ◆ **Construction of joint connections.**

# Consolidation of connections:





# Construction of joint connections:





# Design issues to watch for:





# Design Considerations -





# Design Considerations -





# **Jurisdiction on State Routes ...**

- ◆ **Limited Access State Routes -  
WSDOT Jurisdiction (This includes Limited  
Access routes within incorporated cities.)**
- ◆ **Limited Access Interstate –  
FHWA Jurisdiction**

# **Jurisdiction on State Routes Continued:**

- ◆ **“Managed Access” Routes in the County  
- WSDOT Jurisdiction**
- ◆ **“Managed Access” Routes (within the  
incorporated limits of a city, no matter  
the population size) - City Jurisdiction**
- ◆ **Cities are Required to Adopt “Managed  
Access” Standards – RCW47.50.030(3)**

# Who Benefits from Regulating Access?

## **Motorists –**

- ◆ **Fewer Decision Points**
- ◆ **Fewer Traffic Conflicts (which simplifies the driving task and increases driver safety)**
- ◆ **Fewer Traffic Delays**

# Motorists –



# Who Benefits Continued ...

## **Cyclists -**

- ◆ **Fewer Decision Points**
- ◆ **Fewer Traffic Conflicts (which simplifies the cycling task and increases safety for cyclists)**
- ◆ **More Predictable Motorist Travel Patterns**



# Cyclists -



# Who Benefits Continued ...

## **Pedestrians -**

- ◆ **Fewer access points where motorists enter and exit the roadway, which makes it safer to walk along roadways.**
- ◆ **Have the ability to utilize medians as a refuge when crossing several lanes of traffic.**



# Pedestrians -





# Who Benefits Continued ...

## **Transit Riders -**

- ◆ **Reduced Delay and Reduced Travel Times**
- ◆ **Safer Walking Environment**

# Transit Riders -



# Who Benefits Continued ...

## **Businesses -**

- ◆ **Served my a more efficient transportation system that captures a broader market area.**
- ◆ **Stable property values due to well managed street/roadway corridor.**
- ◆ **More predictable and consistent freight delivery.**



# Businesses -





# Businesses -



# Who Benefits Continued ...

## **Freight Industry -**

- ◆ **Reduced Delay**
- ◆ **Increased Safety**
- ◆ **Lower Transportation Costs**
- ◆ **Shorter Delivery Times**

# Who Benefits Continued ...

## **Government Agencies -**

- ◆ **Cost of delivering an efficient and safe transportation system is lower.**
- ◆ **More effective in accomplishing transportation objectives.**

# Who Benefits Continued ...

## **Communities -**

- ◆ **Safer transportation system.**
- ◆ **Less need for construction, which causes disruption and displacement of businesses and homes.**
- ◆ **More attractive corridor.**
- ◆ **Preserve their investment in the transportation system.**



# **In Summary ...**

## **Access Management along State Routes:**

- ◆ **Improves Traffic Flow and Reduces Delay.**
- ◆ **Reduces emissions and improves fuel economy.**
- ◆ **Preserves Capacity.**
- ◆ **Reduces Accidents.**
- ◆ **Preserves the public investment.**

# Questions?

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